



6CG7

# MEDIUM-MU TWIN TRIODE

9-PIN MINIATURE TYPE

With heater having controlled warm-up time

6CG7

## GENERAL DATA

### Electrical:

Heater, for Unipotential Cathodes:

Voltage (AC or DC) . . . . .	6.3	volts
Current . . . . .	0.6 ± 6%	amp
Warm-up time (Average) . . . . .	11	sec

Direct Interelectrode Capacitances (Each unit, approx.):<sup>0</sup>

Grid to plate . . . . .	4	μf
Grid to cathode, internal shield, and heater. . . . .	2.3	μf
Plate to cathode, internal shield, and heater. . . . .	2.2	μf

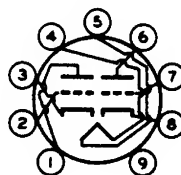
### Characteristics, Class A<sub>1</sub> Amplifier (Each Unit):

Plate Voltage . . . . .	90	250	volts
Grid Voltage. . . . .	0	-8	volts
Amplification Factor. . . . .	20	20	
Plate Resistance (Approx.) . . . . .	6700	7700	ohms
Transconductance. . . . .	3000	2600	μmhos
Plate Current . . . . .	10	9	ma
Plate Current for grid volts = -12.5. . . . .	-	1.3	ma
Grid Voltage (Approx.) for plate μa = 10 . . . . .	-7	-18	volts

### Mechanical:

Operating Position. . . . .	Any
Maximum Overall Length. . . . .	2-5/8"
Maximum Seated Length . . . . .	2-3/8"
Length, Base Seat to Bulb Top (Excluding tip) . . . . .	2" ± 3/32"
Diameter. . . . .	0.750" to 0.875"
Dimensional Outline . . . . .	See General Section
Bulb. . . . .	T6-1/2
Base. . . . .	Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW. . . . .	9AJ

Pin 1 - Plate of  
Unit No.2  
Pin 2 - Grid of  
Unit No.2  
Pin 3 - Cathode of  
Unit No.2  
Pin 4 - Heater  
Pin 5 - Heater



Pin 6 - Plate of  
Unit No.1  
Pin 7 - Grid of  
Unit No.1  
Pin 8 - Cathode of  
Unit No.1  
Pin 9 - Internal  
Shield

## AMPLIFIER — Class A<sub>1</sub>

Values are for Each Unit

### Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE . . . . .	330 max.	volts
GRID VOLTAGE:		
Positive-bias value . . . . .	0 max.	volts

← Indicates a change.

6CG7



6CG7

## MEDIUM-MU TWIN TRIODE

CATHODE CURRENT . . . . .	22	max.	ma
PLATE DISSIPATION:			
Either plate. . . . .	4	max.	watts
Both plates (Both units operating). .	5.7	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode. . . . .	200	max.	volts
Heater positive with respect to cathode. . . . .	200 <sup>▲</sup>	max.	volts

**Typical Operation as Resistance-Coupled Amplifier:**

See RESISTANCE-COUPLED AMPLIFIER CHART No. 29  
at front of this Section

**Maximum Circuit Values:**

Grid-Circuit Resistance:			
For fixed-bias operation. . . . .	1	max.	megohm

**HORIZONTAL-DEFLECTION OSCILLATOR**

*Values are for Each Unit*

→ **Maximum Ratings, Design-Maximum Values:**

*For operation in a 525-line, 30-frame system<sup>□</sup>*

DC PLATE VOLTAGE. . . . .	330	max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE. . . .	660	max.	volts
CATHODE CURRENT:			
Peak. . . . .	330	max.	ma
DC. . . . .	22	max.	ma
PLATE DISSIPATION:			
Either plate. . . . .	4	max.	watts
Both plates (Both units operating). .	5.7	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode. . . . .	200	max.	volts
Heater positive with respect to cathode. . . . .	200 <sup>▲</sup>	max.	volts

**Maximum Circuit Values:**

Grid-Circuit Resistance . . . . .	2.2	max.	megohms
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**VERTICAL-DEFLECTION OSCILLATOR**

*Values are for Each Unit*

→ **Maximum Ratings, Design-Maximum Values:**

*For operation in a 525-line, 30-frame system<sup>□</sup>*

DC PLATE VOLTAGE. . . . .	330	max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE. . . .	440	max.	volts
CATHODE CURRENT:			
Peak. . . . .	77	max.	ma
DC. . . . .	22	max.	ma

→ Indicates a change.



6CG7

6CG7

## MEDIUM-MU TWIN TRIODE

### PLATE DISSIPATION:

Either plate. . . . . 4 max. watts  
Both plates (Both units operating). . . 5.7 max. watts

### PEAK HEATER-CATHODE VOLTAGE:

Heater negative with  
respect to cathode. . . . . 200 max. volts  
Heater positive with  
respect to cathode. . . . . 200<sup>▲</sup> max. volts

### Maximum Circuit Values:

Grid-Circuit Resistance . . . . . 2.2 max. megohms

○ Without external shield.

▲ The dc component must not exceed 100 volts.

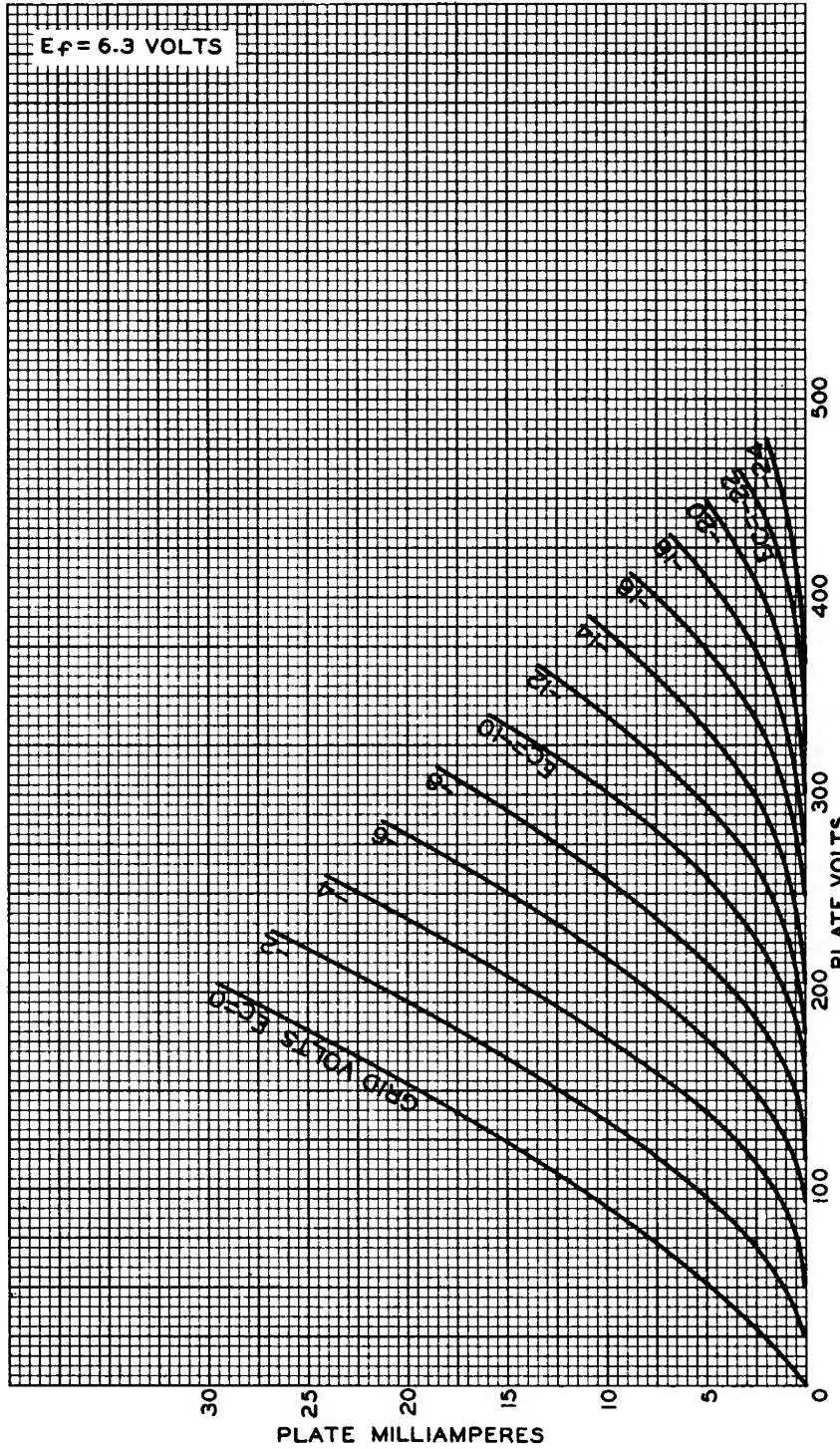
□ As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

6CG7



6CG7

# AVERAGE PLATE CHARACTERISTICS EACH UNIT

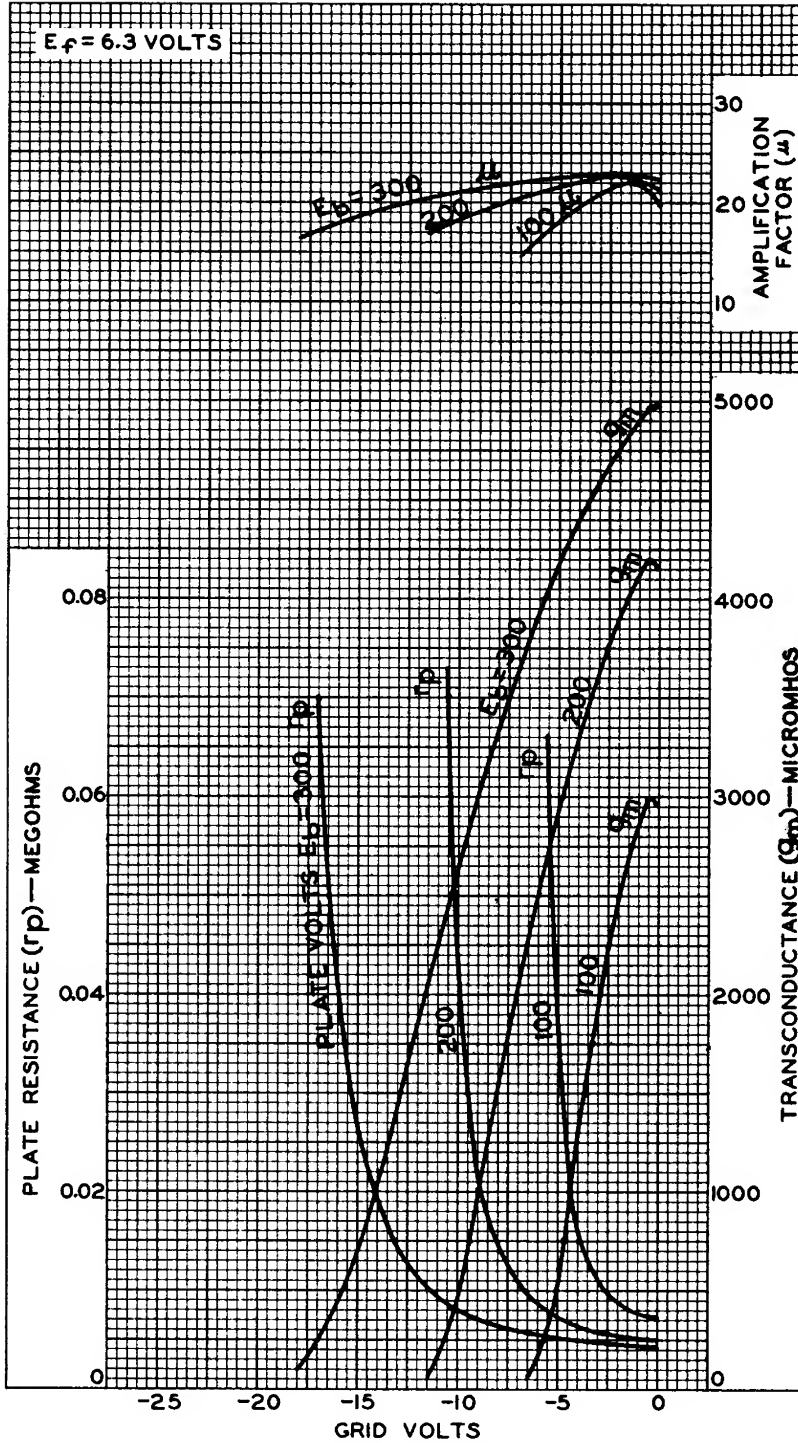




6CG7

# AVERAGE CHARACTERISTICS EACH UNIT

6CG7



ELECTRON TUBE DIVISION  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-8441R1